

MIYAZAKI et al
Serial No. 11/542,604
Amendment dated November 2, 2009
Response to Office Action dated May 5, 2009

REMARKS

Upon entry of this amendment, claims 46-58 are pending. By the present amendment, claims 46, 48, 49 and 56 have been amended, and new claims 57 and 58 have been added. Favorable reconsideration of the application is respectfully requested.

The objection to the reissue oath/declaration for failing to identify at least one error relied upon to support the reissue application rendered moot. Without acquiescing in the objection, applicants submit a Supplemental Declaration in Reissue Application that clarifies at least one error being relied upon to support the reissue application. Accordingly, reconsideration and withdrawal of the objection are respectfully requested.

The rejection of claims 1-56 under 35 U.S.C. §251 is not understood, and is, in any event, now moot. The reissue declaration originally filed in the present reissue application was, indeed, executed by the inventors, Mitsue Miyazaki and Satoshi Sugiura (see, page 3 of the originally filed reissue declaration). As noted above, a supplemental reissue declaration is being submitted herewith. This supplemental declaration is also executed by the same inventors, and not by the assignee. Therefore, reconsideration and withdrawal of this rejection are respectfully requested.

The objection to claims 47-56 is respectfully traversed. Without acquiescing in the objections, claims 48, 49 and 56 have been amended. Moreover, it is respectfully submitted that the dependent claims do, indeed further define elements recited in the independent claims or recite additional features, thus the dependent claims are directed to properly recited subject matter. Accordingly, reconsideration and withdrawal of the objections are respectfully requested.

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The rejection of claims 46-56 under 35 U.S.C. §102(e) over Miyazaki (U.S. Patent No. 6,782,286) is respectfully traversed. Without acquiescing in the rejection, claims 46 and 56 have been amended, and the rejection will be discussed with respect to the claims as amended.

At the outset, example non-limiting support for the amendments and new claims is provided.

Claims 46 and 56 have been amended to include the feature of “at least one of the first 3D scan and the second 3D scan being performed with a gradient magnetic field including a dephase pulse.” Support for this feature can be found in the specification at, for example, Col. 18, lines 33-36, Col. 22, lines 44-49, Figure 23, and Col. 27, lines 22-28.

New independent claims 57 and 58 incorporate the feature of inferior limb imaging synchronized with a pulse wave. Support for this feature can be found in the specification at, for example, Col. 20, lines 45-55, Col. 21, line 65, and Col. 28, lines 5-9.

Turning to the rejection, as noted above, claims 46 and 56 have been amended to specifically recite the feature of “at least one of the first 3D scan and the second 3D scan being performed with a gradient magnetic field *including a dephase pulse.*” (Emphasis added). There is no teaching or suggestion of this specifically recited feature including a dephase pulse in Miyazaki ‘286.

Miyazaki ‘286 discloses that a first 3D scan at a first cardiac phase and a second 3D scan at a second cardiac phase are performed, and subtraction between images obtained by both the 3D scans is performed. However, there is no teaching or suggestion

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in Miyazaki '286 that at least one of the first 3D scan and the second 3D scan is performed with a dephase pulse.

It is axiomatic that in order for a reference to anticipate a claim, the reference must disclose, teach or suggest each and every feature recited in the claim. As set forth above, Miyazaki '286 fails to disclose, teach or suggest each and every feature of the claims. For example, there is no teaching or suggestion in Miyazaki '286 of performing at least one of the first 3D scan and the second 3D scan with a dephase pulse. Therefore, Miyazaki '286 fails to anticipate the claimed invention. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

The rejection of claims 46-55 under 35 U.S.C. §103(a) over Purdy (U.S. Patent No. 5,857,970) in view of Foo et al. (U.S. Patent No. 6,493,569, hereinafter "Foo") is respectfully traversed. Without acquiescing in the rejection, claims 46 and 56 have been amended. Thus, the rejection will be discussed with respect to the amended claims.

As noted above, claims 46 and 56 have been amended to specifically recite the feature of "at least one of the first 3D scan and the second 3D scan being performed with a gradient magnetic field *including a dephase pulse.*" (Emphasis added). There is no teaching or suggestion of this specifically recited feature including a dephase pulse in either Purdy or Foo.

Purdy discloses subtraction of image data at a systole and a diastole. Foo discloses that a contrast MRA image and a mask image are acquired by a refocus SSFP method and subtraction of the contrast MRA image and the mask image is performed. However, as with Miyazaki '286, there is no teaching or suggestion in either Purdy or

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Foo that at least one of the first 3D scan and the second 3D scan is performed with a dephase pulse.

Therefore, even if, *arguendo*, the combination of Purdy and Foo were proper, the proposed combination nevertheless fails to render the claimed invention obvious. There is no teaching or suggestion in either of these references that at least one of the first and second 3D scans is performed with a dephase pulse. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

In view of the foregoing, it is respectfully submitted that the entire application is in condition for allowance. Favorable reconsideration of the application and prompt allowance of the claims are earnestly solicited.

Should the Examiner deem that further issues require resolution, the Examiner is invited to contact the undersigned attorney of record at the telephone number set forth below.

Respectfully submitted,

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